

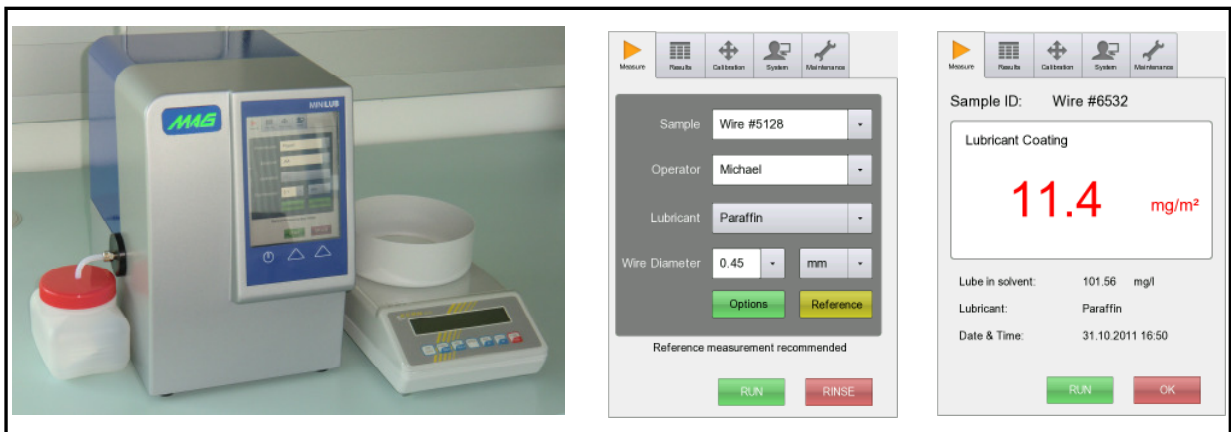
MINILUB – CLAL21 Lubricant Quantity Test System

The MINILUB is a portable non-dispersive infrared (ND-IR) spectrometer that was developed for a fast and automated measurement of the amount of lubricant on enamelled wire samples.

The high precision, speed and ease of operation make it the preferred analyzer for this type of test.

Features

- The MINILUB is an automated, factory calibrated, stand alone system
- Precise measurement results within a few minutes
- Fast and simple to use – no training required
- No calibration measurement and no programming of the analyzer are required
- The intuitive software guides the user through the measurement
- Results can be stored on an USB memory stick, printed or transferred to a LIMS System
- The data memory of the MINILUB holds the results of more than 30.000 measurements
- Multilingual support
- External high precision balance
- Coloured touch-panel



Measuring principle

The wire is placed in a glass flask on the balance. From the known mass and diameter of the wire, the surface of the wire sample is calculated.

About 5 ml of a solvent (tetrachloroethylene, TCE) is added to the glass flask, and lubricant is washed from the wire with the solvent.

The solvent with the lubricant is injected into the analyzer. The absorbance (attenuation) of the infrared radiation at a wavelength where the lubricant strongly absorbs is measured with the ND-IR spectrometer. The concentration of the lubricant in the solvent is obtained from this absorbance value.

From the concentration of lubricant in the solvent and the known mass of the solvent, the total amount of lubricant on the wire is determined.

The final result is the lubricant on the wire given in mg/m^2 .

TECHNICAL DATA	
Dimensions	
Dimensions ((WxHxD)	D 220 x 320 x 280 mm
Weight	5kg
Power Supply	
Power Supply	auto switching 85-264 V AC, 47-63 Hz
Max. Power consumption	70VA
Measurement unit	
Concentration range	0 – 200mg/l
Mass range	20 – 241g
Mass resolution	0.001g
Interfaces	
USB	4x
Ethernet	1x
RS232	1x
Environment	
Operating temperature	10 – 40 °C ambient temperature
Air humidity	Max. 70%, not condensing